

US EPA ARCHIVE DOCUMENT

**OZONE AND PARTICULATE MATTER NAAQS
AND REGIONAL HAZE PROGRAM -
ISSUES OF CONCERN TO STATES AND LOCALITIES
RESPONSES TO QUESTIONS 102-124**

OZONE

Transitional Nonattainment Areas

103. Will ROP plans have to be developed for Transitional areas?

Response: Section 172(c)(2) requires nonattainment area plans to provide for reasonable further progress (RFP), so the SIP will have to meet that requirement. EPA is still developing guidance on this requirement and plans to issue guidance on plans for areas classified transitional in mid-1998. EPA anticipates that areas classified transitional that are relying in whole or in part on the regional NOx strategy will be able to use the progress toward complying with that strategy as meeting--in whole or in part--the requirements for RFP. As noted elsewhere, EPA will publish a supplemental proposal to the NOx regional strategy that will set forth requirements for tracking compliance with the statewide NOx emission budgets.

113. What will be the attainment demonstration requirements for Transitional areas that need to implement local controls for attainment?

Response: EPA has not yet developed guidance on the attainment demonstration requirements for transitional areas that need to implement local controls for attainment, but EPA plans to issue such guidance by mid-1998. The guidance will assist States in the development of a streamlined attainment demonstration which provides for the implementation of additional local controls on the same schedule as the regional transport reductions.

115. What will be the modeling requirements for multistate Transitional areas?

Response: EPA has not yet developed guidance on the attainment demonstration requirements for multistate transitional areas, but EPA plans to issue such guidance by mid-1998. The guidance will assist States in the development of a streamlined attainment demonstration which provides for the implementation of additional local controls on the same schedule as the regional transport reductions.

116. With respect to the anticipated cap-and-trade program for the regional strategy, how will this program be implemented, what is required and what is optional and what flexibility is

contemplated?

Response: The EPA is planning to develop and administer an interstate cap-and-trade program that could be used to implement statewide NOx emission budgets. States electing to reduce emissions from the types of sources covered by this program in order to achieve and maintain the statewide emissions budgets could voluntarily participate in this program. If a State elects to use this program, the State would need to submit it as part of the SIP in response to the SIP call. The details of this program are currently under development and will be discussed in the model NOx cap-and-trade rule that EPA intends to propose in the supplemental notice of proposed rulemaking in the Spring of 1998. In developing the cap-and-trade program, EPA will build upon the work produced by OTAG's Trading/Incentives Work Group. This model rule will outline EPA and State responsibilities for implementing the program. Generally, EPA expects that it would be responsible for managing the emissions data and market functions of the program and that States would have the primary responsibility for enforcing the requirements of the program.

117. What transportation conformity requirements will apply prior to designations and the effectiveness of the Transitional area conformity requirements?

Response: Where the pre-existing ozone standards are not being revoked, areas that are currently subject to transportation conformity will continue demonstrating conformity in the same manner as they are now, until designations for the eight-hour standard occur. Areas that are not currently subject to transportation conformity will not have transportation conformity requirements unless and until they are designated nonattainment.

The Interim Implementation Guidance released December 29, 1997, discusses the transportation conformity requirements that will apply in areas where the one-hour ozone standard is revoked. (Briefly, transportation conformity continues to apply only in those areas with approved ozone maintenance plans.) At a later date, EPA will issue guidance regarding the applicability of transportation conformity in areas where the pre-existing PM-10 standard is revoked.

Other Nonattainment Areas Under the 8-Hour Standard

104. Will ROP plans have to be developed for new nonattainment areas under the eight-hour standard?

AND

106. If ROP plans will be required for the eight-hour standard, how will ROP be implemented (i.e., What counts? From where can/must reductions come?)

Response: For purposes of the 8-hour standard, section 172(c)(2) (under Subpart 1) requires

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nonattainment area plans to provide for reasonable further progress (RFP), so the SIP will have to meet that requirement. EPA is still developing guidance on this requirement. EPA guidance on implementing the new NAAQS is scheduled to be issued by the end of 1998. As stated in the Presidential Directive, "Nonattainment areas that do not attain the 1-hour standard by their attainment date would continue to make progress in accordance with the requirements of Subpart 2 ; the control measures needed to meet the progress requirements under Subpart 2 would generally be sufficient for meeting the control measure and progress requirements of Subpart 1 as well."

112. In designating areas under the eight-hour ozone standard, will EPA designate the entire CMSA? Will EPA designate partial counties?

Response: EPA has not yet developed guidance on the boundaries of the nonattainment areas under the 8-hour standard, but EPA plans to issue such guidance by the end of 1998. As a general matter, EPA does not anticipate designating partial counties at this time. EPA is also considering the need for designating nonattainment areas larger than CMSA's to account for regional transport of ozone and its precursors.

EPA will be issuing initial guidance in 1998 to aid States in making the submissions required pursuant to section 107(d)(1)(A) of the Clean Air Act. Throughout 1998, EPA and States will be analyzing the effects of regional and local transport on existing or potential nonattainment areas within their borders and EPA will be moving to finalize its regional NOx rule.¹ States will need time to assess the effects of transport on individual areas and determine which locations "contribute" to "nearby" monitored violations, as those terms are used in the definition of "nonattainment area" in section 107(d)(1)(A)(i). For example, if an area that is monitoring a violation is expected to attain the standard through implementation of regional NOx measures, it may not be reasonable to include all of the surrounding suburban counties in the nonattainment area if those counties' contribution to nonattainment can be shown to be insignificant in light of the controls to be installed in upwind areas.

EPA expects that the need to await the outcome of the regional NOx rulemaking and other analyses of regional and local transport will result in the Agency's determining in 1999 that it has insufficient information to decide how area boundaries should be drawn for the revised standard. EPA anticipates that upon completion of its regional NOx rulemaking and other regional and local transport analyses, Governors will wish to submit during 1999 revised designation recommendations to account for the results of the transport analyses. EPA also intends to issue additional guidance to States upon conclusion of its regional NOx rule to aid States in drawing nonattainment area boundaries. After Governors submit revised recommendations in 1999, EPA could be expected to need until 2000 to determine finally how the area boundaries should be

¹ See 62 Fed. Reg. 60318 (11/7/97) for the regional NOx rule proposal.

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drawn, to notify the Governors of any expected modifications to their recommendations, and to promulgate the designations.

Continuing Nonattainment Areas Under the 1-hour Standard/Transport and Regional Strategies

102. Will rate-of-progress (ROP) provisions still apply for existing ozone nonattainment areas under the new standard?

Response: As stated in the memorandum titled "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM-10 NAAQS" signed on December 29, 1997, "After promulgation of the new (8-hour ozone) NAAQS the continuation of the ROP requirement is grounded in both the retention of the 1-hour 0.12 ppm ozone NAAQS and the requirements of section 182 (c)(2)(B) in subpart 2. The ROP requirements continue until the area has air quality meeting the 1-hour standard. Accordingly, areas with ROP plans approved by EPA should continue to implement the ROP requirements of their plans, and areas that have not submitted plans remain subject to the requirement."

105. If ROP plans will be required for both existing (one-hour) and new (eight-hour) nonattainment areas, how will these be integrated to prevent overlapping and/or conflicting requirements?

Response: As discussed in the response to question #106, the President's Directive provides that the control measures needed to meet the ROP requirements for the 1-hour standard would generally be sufficient to meet the progress requirements for the 8-hour standard for the period during which both standards apply. The EPA believes that all efforts to progress toward attainment of the 1-hour standard will provide progress toward attaining the 8-hour standard. Although EPA is still developing guidance on RFP and ROP for the new 8-hour standard as noted in the response to question 106, EPA does not anticipate that RFP requirements will negatively overlap or conflict.

107. How did EPA determine the April 1998 date for state submittal of attainment demonstration SIPs for the one-hour ozone standard?

Response: Attainment demonstrations and SIP's for the 1-hour standard were due November 1994. The April 1998 date is based on an extension provided under the March 2, 1995 policy statement to complete the OTAG study and adjusted due to a delay in the completion of that study.

108. What is the purpose of the April 1998 submittal, given that EPA has proposed a SIP call to be promulgated in fall 1998 and states have up to 18 months following promulgation to submit

their SIPs?

Response: The April 1998 submittal is intended to fulfill an independent state obligation for an attainment demonstration which was due November 1994. A SIP revision to fulfill EPA's SIP call for NO_x reductions is a separate obligation. EPA's proposed SIP call requires submittal by the states in 12 months rather than 18 months following the final call.

109. How can states, by April 1998, make commitments in their SIPs for rate-of-progress to the year 2007 and measures to attain the one-hour ozone standard in the absence of a final SIP call?

Response: EPA believes that states should incorporate the boundary conditions reflected in the proposed SIP call when developing their attainment demonstrations. In the event the final SIP call changes significantly from what was proposed, States will be permitted to adjust their attainment demonstrations to reflect the effects of the final SIP call.

110. Will bump ups proceed for areas where the additional measures required for the more stringent classification will provide no incremental benefits towards attainment?

Response: Retention of subpart 2 subjects States with areas failing to attain the 1-hour NAAQS to bump up to a higher classification and to the mandatory requirements of the higher classification, unless the area is granted an extension of its attainment date by EPA in accordance with section 181 of the Act. Areas potentially subject to bump-ups will be individually evaluated in accordance with these criteria.

111. How does EPA plan on applying the provisions of Section 179(d) on consequences for failure to attain the ozone standard?

Response: EPA is still in the process of soliciting input on how to apply the provisions of Section 179(d).

114. Must the entirety of an existing multistate nonattainment area remain in the same status (i.e., can part of the area be designated as Transitional)?

Response: In order to lend stability to implementation programs, EPA's long-standing policy is not to divide nonattainment areas or reclassify portions of nonattainment areas. Certain exceptions have been made to correct errors in the initial designations. Thus, at this time, EPA anticipates currently designated nonattainment areas will stay intact until the area attains the 1-hour standard.

118. What will be the attainment demonstration requirements for "bump up" areas?

Response: States with areas that are being bumped up should submit to the appropriate EPA

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Regional Office, by the date specified in the final bump up notice, their attainment demonstrations for the 1-hour standard based on the new attainment date, including their modeling analysis and supporting documentation. The document, "Guidance for Implementing the 1-Hour Ozone and Pre-Existing PM₁₀ NAAQS" states that, "...the details of the plan requirements for areas bumped up from moderate to serious will be addressed in connection with individual area bump ups." Consequently, areas that are bumped up should work closely with the appropriate EPA Regional Office on their specific attainment demonstration requirements.

PARTICULATE MATTER

PM_{2.5} Monitoring

119. Is EPA committing to fund the entire PM_{2.5} monitoring network and associated operation and maintenance with new, not reprogrammed funds for state and local agencies? What is the status of any such funding? What is the timing?

Response: The EPA has committed to provide funding for all categories of labor and equipment necessary to fully implement a 1,500 site PM_{2.5} network, including both capital expenditures and operation and maintenance costs over the two-year implementation schedule.

The total FY 1998 funding for PM_{2.5} monitoring (including capital and operations/maintenance) is \$35,678,000 in Section 103 grant dollars. Of this total FY 1998 funding package, the EPA reprogrammed \$6,935,000 in grant funds from PAMS, PM₁₀ monitoring, market based incentives, and data delivery to form the basis for our FY 1998 budget request. The remaining \$28,743,000 (which includes the original President's request plus additional funding from Congress) is new money. This total funding package has been approved by Congress and the President. The EPA is awaiting information on the President's FY 1999 budget which will be announced as part of the State of the Union address. Once this is announced, the Agency will be in a position to provide more information on the FY 1999 funding for the PM_{2.5} monitoring program.

A portion of the \$35,678,000 will be used to purchase samplers under the National PM_{2.5} Sampler Procurement Contract, the amount of which will depend upon the actual number and type of sampling equipment each State/local agency will need. OAQPS has estimated numbers for each State, and copies of these estimates were provided to each Regional Office on November 12, 1997, under a memorandum from John Seitz, OAQPS Director. With this information, OAQPS has requested that each Region contact their associated State agencies to refine these OAQPS estimates, and to provide a response by January 15, 1998, with more refined estimates of the numbers and types of samplers that US EPA should expect to order from this National PM_{2.5} Sampler Procurement Contract. OAR issued a revised FY 1998 grant allocation on January 9, 1998 which included an allocation for the operation and maintenance of the PM_{2.5} network. We still anticipate awarding the section 103 grants in late February and early March. A more detailed

breakdown of the grant guidance schedule follows:

TIME LINE FOR SECTION 103/PM_{2.5} PROGRAM START-UP

<i>September 30, 1997</i>	All draft documents from subworkgroups are due to the EPA Steering Committee.
<i>October 15, 1997</i>	EPA Regions send letters to States asking for their commitment to the National PM _{2.5} Sampler Procurement Contract for purchase of samplers.
<i>November 1, 1997</i>	State commitment to use National PM _{2.5} Sampler Procurement Contract for purchase of samplers.
<i>December 15, 1997 - January 31, 1998</i>	EPA Regions will negotiate Section 103 work plans.
<i>January 11, 1998</i>	OAR issued revised FY 1998 grant allocation, including allocation for PM _{2.5} monitoring and data collection.
<i>January 15, 1998</i>	EPA Regions will notify OAQPS of the number of samplers required for each State. EPA Regions provide OAQPS a list of proposed PM _{2.5} sites.
<i>February 1, 1998</i>	States Section 103 grant applications are due to the EPA Regions containing approved program work plans and draft network plans.
<i>February 15, 1998 - March 1, 1998</i>	EPA Regions award Section 103 grant for PM _{2.5} Monitoring Network to States.
<i>March 2, 1998</i>	EPA Regions composite and submit orders for numbers and types of samplers to OAQPS for ordering from the National PM _{2.5} Sampler Procurement Contract.
<i>March 31, 1998</i>	EPA OAQPS awards National PM _{2.5} Sampler Procurement Contract.
<i>April 2, 1998</i>	EPA Regions provide comments to States on the draft network plans.
<i>June 1, 1998</i>	States begin to receive samplers.
<i>July 1, 1998</i>	States submit a final PM _{2.5} network description. States submit Quality Assurance Project Plans to EPA Regions for the PM Monitoring Network.
<i>July 31, 1998</i>	Regions approve final PM _{2.5} network descriptions.

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October 1, 1998 - Regions and States conduct final test and training phase.
December 31, 1998

Before December 31, 1998 - Regions and States plan QA and speciation activities.

January 1, 1999 State PM_{2.5} Monitoring Networks (1,100 sites) become operational.

Quarterly EPA Regions conduct oversight conference calls and/or visits with States on implementation of PM_{2.5} Monitoring Network.

Semi-annually EPA reports on the States' PM_{2.5} Monitoring Network Review implementation in mid-year and end of year reports.

Other PM_{2.5} Issues

120. What efforts will EPA undertake to refine existing emission factors or develop new emission factors for PM_{2.5}? Will these emission factors be available in time for states and localities to use them to develop their emission inventories?

Response: EPA is undertaking an aggressive program to develop and improve emission factors for the important source categories impacting PM_{2.5} ambient concentrations. This includes improving the emission estimation tools for both direct emissions of PM_{2.5} particles and emissions of precursor gases that form particles through atmospheric reactions. This is a multi-year, ongoing program, but preliminary refinements will be made to emission estimation tools in 1-2 years to enable initial model runs to be conducted in 2-3 years. Additional improvements will continue to be made to the emission estimation methods such that the inventory can be refined prior to control strategy development.

In order to advance the development of PM_{2.5} emission inventories, a comprehensive emission inventory reporting rule is being developed which will propose that States compile and submit emissions data for all criteria pollutants and their precursors from major sources and major source categories on a three year cycle; reporting on only the largest and most significant point sources would be retained on an annual cycle. Data transmission and data management procedures are being revised to minimize the burden on States for submitting the data.

121. What funding does EPA intend to provide for PM_{2.5} data analysis and the development of data analysis plans?

Response: The State section 103 grants for PM_{2.5} monitoring include funds targeted for operation and maintenance. A portion of these funds is intended to be used for data analysis and interpretation beyond data quality assessment activities and the routine submittal of data to AIRS.

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In FY98, data analysis activities should be primarily directed toward the development of data analysis plans for the future. To assist in this process, EPA will be developing data analysis software and broad data analysis plans. States may subsequently use these broad plans to develop analysis plans which will address the particular needs of their specific areas. EPA anticipates that these broad data analysis plans will be available in the spring of 1998.

122. EPA has indicated that PM_{2.5} is a regional issue. What criteria will be used to determine if there is a local PM_{2.5} problem and whether local strategies will be necessary?

Response: The determination that PM_{2.5} concentrations are regional in nature is confirmed by data (i.e., sulfates, nitrates, etc.) collected at the nonurban IMPROVE sites. These data indicate that the country can be divided into roughly an Eastern and a Western segment when considering total fine particle mass concentrations. Regional concentrations in the East are higher than those observed in the West. Physically, fine particulates (i.e., particles with aerodynamic diameters less than or equal to 2.5 micrometers) will be more susceptible to atmospheric transport than PM₁₀ because of their size and density. Thus, the potential exists for more widespread, homogeneous, regional concentrations of both primary and secondary particulates. However, until the PM_{2.5} network is installed and actual data from these sites are collected, archived and analyzed, it is not possible to address the issue of local, "hot spot" concentrations with any degree of precision. Preliminary results for site-specific regional studies have identified the existence of local PM_{2.5} "hot spots", which could conceivably be handled with local control strategies. However, these issues can only be quantified and adequately addressed with the use of the PM_{2.5} data, which will be collected beginning in late 1998. EPA Headquarters and Regional Offices will work with the State, local and tribal agencies to develop criteria to determine whether or not local strategies are necessary for a particular PM_{2.5} problem.

REGIONAL HAZE

123. What funding will EPA provide for implementation of regional haze regulations?

Response: Because visibility impairment is caused largely by fine particles, a number of activities needed for implementation of the PM-2.5 standards will also be needed for implementation of the regional haze regulations. Therefore, EPA is pursuing ways to leverage resources for implementation as appropriate. Common activities needed for the two programs include development of section 110 SIP's, air quality monitoring, emission inventory development, and ultimately the development and application of regional modeling analyses. EPA also recommends multi-state approaches to some of these planning and assessment activities. The primary area for which regional haze support will increase in the near-term is for expansion of monitoring in mandatory Class I Federal areas.

For the past several years section 105 grant funds have been used to support speciated PM-2.5

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and visibility monitoring in 30 of the 156 Federal class I areas across the country via the IMPROVE program. The proposed Regional Haze rule includes requirements for expanded monitoring. With the technical connections between visibility and fine aerosols logically pointing to a comprehensive monitoring program that services PM_{2.5} and visibility assessments, a technical plan has recently been developed to integrate the PM_{2.5} network with the existing IMPROVE network. This plan includes establishment of 78 additional IMPROVE sites over the next two years on or near Federal Class I areas. The 108 total IMPROVE sites will have speciated PM-2.5 monitoring and thus can serve dual purposes: they will allow for assessment of visibility conditions, and they can serve as background or transport sites under the PM-2.5 network as well. Funding for these additional IMPROVE sites will come from the \$35.678 million in section 103 grant funds provided for PM_{2.5} monitoring in FY 1998. Currently, discussions are underway with EPA, State/local agencies and the IMPROVE Steering Committee to facilitate integration of IMPROVE and the National PM_{2.5} Monitoring Program.

CROSS-CUTTING ISSUES

Funding

124. What funding will be made available for monitoring, planning/implementation and public outreach/education? When? Will any of it be Section 105 funds and will matching be required? Will this funding be flexible?

Response: For FY 1998, the Agency received an increase in grant funds for implementation of the PM_{2.5} monitoring network. In providing the increase, Congress stipulated that the \$35,678,000 authorized for particulate matter monitoring and data collection be awarded under section 103 of the Clean Air Act, thus eliminating the requirement for matching funds. The remaining FY 1998 grant funds totaling \$146,254,900 will continue to be awarded under section 105 which typically requires a 40% match by the grantee.

For additional information pertaining to the PM_{2.5} monitoring and data collection allocation please see the response to question 119 above. In regards to the \$146,254,900 OAR has allocated these funds to the Regional Offices consistent with early agreements with STAPPA/ALAPCO. Included within the FY 1998 allocation are funds for enhanced ozone monitoring, emissions inventory improvement project work, and public outreach/education funds for both the NAAQS and for mobile source activities.

While OAR allocates grant funds to the Regional offices based upon priorities negotiated and agreed to by STAPPA/ALAPCO, a significant portion of the annual allocation is for on-going work that the Region and State or local agency agree to in the grantee's work plan. Of the \$146,254,900 in grant funds allocated in FY 1998, almost 75% was for on-going work; 20% was for directed priorities; and 6% was administered nationally to support such activities as the Air

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Pollution Training Institute or provide funding for the Northeast Ozone Transport Commission.